

Appl. No. 09/700,712
Amendment dated: January 3, 2006
Reply to OA of: July 1, 2005

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-16(cancelled).

17(currently amended). A Δ *thyA* strain of *Vibrio cholerae* deprived of its *thyA* gene functionality by selected nucleotide sequence deletion and/or insertion in the chromosome ~~and thus lacking the functionality of the *thyA* gene~~ comprising at least one episomal autonomously replicating DNA element having a functional *thyA* gene that enables the strain to grow in the absence of thymine in the growth medium ~~and the one or several~~ wherein the at least one episomal autonomously replicating DNA elements further ~~comprising~~ comprises a structural gene encoding a homologous or heterologous protein.

18(Currently Amended). A Δ *thyA* strain of *Vibrio cholerae* wherein the strain has been deprived of its *thyA* gene functionality by site-directed mutagenesis in the V. ~~*Cholerae cholerae*~~ *cholerae* chromosome ~~for the~~ by deletion and/or insertion of nucleotides at the locus of the *thyA* gene.

19(previously presented). The Δ *thyA* strain of *Vibrio cholerae* according to claim 17, wherein the at least one episomal autonomously replicating DNA element is a plasmid.

20(previously presented). The Δ *thyA* strain of *Vibrio cholerae* according to claim 17, wherein the at least on episomal autonomously replicating DNA have element has a foreign *thyA* gene.

Appl. No. 09/700,712
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21(currently amended). The Δ *thyA* strain of *Vibrio cholerae* according to claim 20, wherein the foreign *thyA* gene is an *E. coli* *thyA* gene.

22(previously presented). The Δ *thyA* strain of *Vibrio cholerae* according to claim 17, wherein the encoded heterologous protein is selected from heat labile enterotoxin B-subunit of *Escherichia coli* (LTB) and *Schistosoma japonicum* glutathione S-transferase 26 kD protein (GST 26 kD).

23(currently amended). The Δ *thyA* strain according to claim 17, wherein the *thyA* gene of the chromosome has the nucleotide sequence of SEQ ID NO: 1, or said nucleotide sequence which has some natural or unnatural nucleotide extensions, truncations, deletions or additions that do not interfere with the natural function of the nucleotide sequence before it has been deprived of its functionality as a *thyA* gene.

24(new). The Δ *thyA* strain of *Vibrio cholerae* according to claim 18, wherein the structural *thyA* gene of the chromosome has the nucleotide sequence of nucleotides 738 -1688 in the SEQ ID NO:1 before it has been deprived of its functionality as a *thyA* gene and wherein approximately 200 base pairs of said structural *thyA* gene is deleted followed by an insert of a non-coding region of DNA.

25(new). The Δ *thyA* strain of *Vibrio cholerae* according to claim 18, wherein the strain has its structural *thyA* gene removed from the *thyA* gene of the chromosome.

26(new). The Δ *thyA* strain of *Vibrio cholerae* according to claim 17, wherein the strain has its structural *thyA* gene removed from the *thyA* gene of the chromosome and wherein the at least one episomal autonomously replicating DNA element has a foreign *thyA* gene.

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27(new). The $\Delta thyA$ strain of *Vibrio cholerae* according to claim 26 wherein the foreign *thyA* gene is an *E. coli thyA* gene.

28(new). The $\Delta thyA$ strain of *Vibrio cholerae* according to claim 27, wherein the encoded heterologous protein is heat labile enterotoxin B-subunit of *Escherichia coli* (LTB).

29(new). The $\Delta thyA$ strain of *Vibrio cholerae* according to claim 27, wherein the encoded heterologous protein is *Schistosoma japonicum* glutathione S-transferase 26 kD protein (GST 26 kD).